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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,686	08/21/2000	Wolfgang Peveling	10191/1389	6761

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EXAMINER

KNOLL, CLIFFORD H

ART UNIT	PAPER NUMBER
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2112

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Please find below and/or attached an Office communication concerning this application or proceeding.

PR6

Office Action Summary	Application No. 09/582,686	Applicant(s) PEVELING ET AL.	
	Examiner Clifford H Knoll	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is responsive to communication filed 6/29/2000. Claims 1-11 have been cancelled. Claims 12-22 are currently pending.

Requirement for Information

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The information is required to complete the background description in the disclosure by documenting the known transmission inhibiting device as set forth in the specification (p. 1, line 33 – p. 2, line 12) and Figure 2. Documentation of the CAN transmission inhibit function (CANSTOP) of the real-time capable serial bus system (p. 1, lines 10-15) is also required.

In response to this requirement, please provide the title, citation and copy of each publication that is a source used for the description of the prior art in the disclosure. For each publication, please provide a concise explanation of that publication's contribution to the description of the prior art.

In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

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The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete reply to the requirement for that item.

This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

Drawings

Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid

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abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 12 and 17, the “performing” and the “activating” of the inhibit function are unclear because their relationship cannot be clearly established. The “predefined” is unclear because it is not clear if a definition is intended to be recited.

In claims 13, 18 and 20, the position of “between” is unclear because the relationship between the first node and network/port has not been established.

In claim 21, the “upstream” is unclear what upstream means in the context of the port.

In view of indefinite claim language, multiple rejections covering various interpretations was deemed appropriate.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Watkins (US 5161162).

Regarding claim 12, Watkins discloses tapping the potential of the line and feeding it back to the component (e.g., col. 1, lines 57-59), activating an inhibit function and transmitting a predefined test signal message from the network component to the network via the transmission line with inhibit active, testing the inhibit function by analyzing what is fed back (e.g., col. 2, lines 57-60).

Regarding claim 13, Watkins also discloses tapping the potential between the first node and a transmission port (e.g., col. 9, lines 31-36).

Regarding claim 14, Watkins also discloses the tapped potential fed back to the interrupt port and the inhibit function tested by analyzing whether the interrupt function is triggered (e.g., col. 9, lines 9-16).

Regarding claim 15, Watkins also discloses a scannable input port where the tapped potential is used to test the inhibit function (e.g., col. 9, lines 9-16).

Regarding claim 16, Watkins also discloses closing a switch located between the first and a supply potential to apply the logic signal (e.g., col. 1, lines 59-62).

Regarding claim 17, Watkins discloses a test signal line to tap a potential of the transmission line and to feed the tapped potential back to the network component (e.g., col. 1, lines 57-59), a test-signal message transmitting device to transmit a predefined test signal message from the network component to the network via the transmission line in response to an activated inhibit function testing the inhibit function by analyzing what is fed back (e.g., col. 2, lines 57-60).

Regarding claim 18, Watkins also discloses a resistance provided between the first node and a transmission port (e.g., col. 2, lines 1-3).

Regarding claim 19, Watkins also discloses transmission inhibit signal to generate an inhibit signal during activation (e.g., col. 1, lines 62-65), a switching device between a supply potential and the first node which is closed in response to the inhibit signal (e.g., col. 1, lines 59-62).

Regarding claim 20, Watkins also discloses the test signal for tapping the potential of the transmission line is connected to a second node between the first node and the transmission port (e.g., Figure 2a, "CPU MEM ADDRESS REGISTER").

Regarding claim 21, Watkins also discloses the test signal line for tapping the transmission of the line is connected to a second node in the network component upstream of the transmission port of the network component (e.g., Figure 2a, "CPU MEM ADDRESS REGISTER").

Claims 12-13, 15-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Jacobson (US 6453014).

Regarding claim 12, Jacobson discloses tapping the potential of the line and feeding it back to the component (e.g., col. 8, lines 45-47), activating an inhibit function and transmitting a predefined test signal message from the network component to the network via the transmission line with inhibit active, testing the inhibit function by analyzing what is fed back (e.g., col. 8, lines 48-50).

Regarding claim 13, Jacobson also discloses tapping the potential between the first node and a transmission port (e.g., col. 8, lines 50-52).

Regarding claim 15, Jacobson also discloses a scannable input port where the tapped potential is used to test the inhibit function (e.g., col. 8, lines 51-52).

Regarding claim 16, Jacobson also discloses closing a switch between the first node and a supply (e.g., col. 8, lines 27-32).

Regarding claim 17, Jacobson discloses tapping the potential of the line and feeding it back to the component (e.g., col. 8, lines 45-47), activating an inhibit function and transmitting a predefined test signal message from the network component to the network via the transmission line with inhibit active, testing the inhibit function by analyzing what is fed back (e.g., col. 8, lines 48-50).

Regarding claim 18, Jacobson also discloses a resistance between the first node and a port (e.g., col. 8, lines 23-27).

Regarding claim 19, Jacobson also discloses closing a switch between the first node and a supply (e.g., col. 8, lines 27-32)

Regarding claim 20, Jacobson also discloses tapping the potential between the first node and a transmission port (e.g., col. 8, lines 50-52).

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Regarding claim 21, Jacobson also discloses the test signal line for tapping the transmission of the line is connected to a second node in the network component upstream of the transmission port of the network component (e.g., Figure 6).

Claims 12-17, 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Thomson.

Regarding claim 12, Thomson discloses tapping the potential of the line and feeding it back to the component (e.g., col. 6, lines 40-42), activating an inhibit function and transmitting a predefined test signal message from the network component to the network via the transmission line with inhibit active, testing the inhibit function by analyzing what is fed back (e.g., col. 6, lines 54-61).

Regarding claim 13, Thomson also discloses tapping the potential between the first node and a transmission port (e.g., col. 7, lines 19-21).

Regarding claim 14, Thomson also discloses the tapped potential fed back to the interrupt port and the inhibit function tested by analyzing whether the interrupt function is triggered (e.g., col. 9, lines 22-25).

Regarding claim 15, Thomson also discloses a scannable input port where the tapped potential is used to test the inhibit function (e.g., col. 6, lines 62-64).

Regarding claim 16, Thomson also discloses closing a switch located between the first and a supply potential to apply the logic signal (e.g., Figure 4, "TXEN0).

Regarding claim 17, Thomson discloses a test signal line to tap a potential of the transmission line and to feed the tapped potential back to the network component (e.g., col. 6, lines 40-42), a test-signal message transmitting device to transmit a predefined test signal message from the network component to the network via the transmission line in response to an activated inhibit function testing the inhibit function by analyzing what is fed back (e.g., col. 6, lines 54-61).

Regarding claim 19, Thomson also discloses transmission inhibit signal to generate an inhibit signal during activation (e.g., Figure 4, "TXEN0"), a switching device between a supply potential and the first node which is closed in response to the inhibit signal (e.g., Figure 4, "TXEN0", "TXEN1").

Regarding claim 20, Thomson also discloses the test signal for tapping the potential of the transmission line is connected to a second node between the first node and the transmission port (e.g., Figure 4, "RXREF0", "RXREF1").

Regarding claim 21, Thomson also discloses the test signal line for tapping the transmission of the line is connected to a second node in the network component upstream of the transmission port of the network component (e.g., Figure 4, "RXREF0").

Regarding claim 22, Thomson discloses the CAN bus (e.g., Figure 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

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be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins in view of Hormel (US 6031823), further in view of standard bus equivalents, as evidenced by Reeb (US 6600723).

Regarding claim 22, Watkins discloses a network control component (e.g., col. 9, lines 39-42) but fails to expressly mention a particular automotive serial standard; however this is disclosed by Hormel. Hormel discloses a serial automotive standard with an inhibit function (e.g., col. 9, lines 20-25, col. 10, lines 13-15). It would be obvious to use Hormel in combination with Watkins, because Hormel teaches the advantages of using an inhibit test function in combination with a serial bus, such as the system of Watkins, but using a particular automotive serial bus. Although the automotive serial bus is not a CAN bus, Examiner takes Official Notice that the bus of Hormel are, for the purposes of automotive networking, considered equivalents as evidenced by Reeb (e.g., col. 2, line 64 – col. 3, line 7). A person of ordinary skill in the art would combine the specific CAN bus with the combination of Watkins and Hormel because CAN and the bus of Watkins are widely known serial bus standards for automotive applications. Therefore it would be obvious to one of ordinary skill in the art to combine Hormel with Watkins and standard bus equivalents in order to obtain the claimed invention.

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Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomson in view of common transceiver design practice as evidenced by Hanf (US 6115831).

Regarding claim 18, Thomson also discloses a transceiver, but neglects to mention implementational details of a resistor between the first node and the transmission port; however Examiner takes Official Notice that this detail standard transceiver design as evidenced by Hanf (e.g., Figure 2, "16", "17"). It would be obvious to combine transceiver design with Thomson because Thomson implements a standard CAN bus transceiver while neglecting to disclose the resistor. Therefore it would be obvious to one of ordinary skill in the art to combine standard practice in transceiver design with Thomson to obtain the claimed invention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nguyen (US 4998069) and Levinson (US 5604735) both disclose different embodiments of inhibit test functions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clifford H Knoll whose telephone number is 703-305-8656. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 703-305-4815. The

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fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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